



Linda L. Agnew  
Acting Commissioner

## MEMORANDUM

**To:** Education Committee Members  
Higher Education and Employment Advancement Committee Members  
Labor and Public Employees Committee Members

**FROM:** Linda Agnew, Acting Commissioner, Department of Labor  
Mary Ann Hanley, Office for Workforce Competitiveness

**DATE:** November 15, 2010

**RE:** Public Act No. 10-76 Section 3 (b)(1)

Attached you will find "information identifying general economic trends in the state; (B) occupation information regarding the public and private sectors, such as continuous data on occupational movements". This information is based upon the current occupational projections developed by the Connecticut Department of Labor, Office of Research. The information has been formatted to provide data related to those occupations that require an occupational license, certificate, or specific skill training.

We are not able to provide information concerning emerging regional, state and national workforce needs over the next thirty years. The Office of Research provides data regarding current economic conditions in the state, both short term and long term occupational projections and the education and training needs of those occupations. At this time it is not possible to predict what the educational requirements will be for jobs that have not been defined or developed other than to say that most jobs will require education, skills and experience beyond high school.

Our agencies are ready to work with the Career Technical High School System to develop mechanisms that will ensure students receive the best occupational information available when they make their career choices.

**CC:** Patricia Ciccone, Superintendent, Connecticut Career Technical High School  
Mark McQuillan, Commissioner, State Department of Education

# **Current Conditions and Outlook for the Connecticut Economy: 2009-2011\***

Daniel Kennedy, Senior Economist, CTDOL Office of Research

## **EXECUTIVE SUMMARY**

### ***CURRENT CONNECTICUT ECONOMIC CONDITIONS: Spring 2010***

Connecticut seems to have done something over this cycle that it has not done before in the Post Cold War Era. Non-Farm Employment turned down going into the last recession after that of the U.S. The U.S. officially went into recession in December 2007, and employment turned down that same month. Yet Connecticut's Non-Farm Employment did not turn down until March 2008. Further, it appears that the U.S. and Connecticut employment cycles both bottomed in December 2009. If these turning points hold up in next year's benchmark, it would mean that Connecticut's recovery coincided with the U.S.—again, a first in the Post Cold War Era. On the other hand, while the U.S. had job declines of 3.0% per year on an annualized basis, over 24 months, Connecticut's employment contracted at a 3.5% per year annualized basis, over 21 months.

A STRONG COMEBACK?— Connecticut's job-growth has been stronger than U.S. job-growth from December 2009 through May 2010. Connecticut's Non-Farm Employment grew by 0.91%, while that for the U.S. grew by 0.76%. For both the U.S. and Connecticut economies, the jobs numbers have been boosted by the 2010 Census.

WHERE IS THE JOB-GROWTH COMING FROM?—Reflecting the hiring of temporary Census workers, U.S. Federal employment grew by 571,000, or 20.2%, and Connecticut's Federal employment grew by 6,200, or 33.3%. Census workers have accounted for a significant number of the jobs created both the U.S. and Connecticut since the recovery. Between December 2009 and May 2010, the hiring of temporary workers for the Census accounted for 50% of net, new U.S. job-growth and for 40% of

\* Originally published as Current Conditions and Outlook for the U.S. and Connecticut Economies: 2009-2011. Volume 2- The Connecticut Economy, Executive Summary. The original unabridged publication is available from the CTDOL, Office of Research upon request.

Connecticut job-growth. So where is private-sector job-growth, and where is it coming from? The second largest contributor to job-growth, and largest private sector NAICS sector, is Accommodation and Food Services, which accounted for 36.1%, or 5,200 net, new jobs. However, preliminary Unemployment Insurance (UI) tax data indicate that though there has certainly been robust job-growth in Accommodation and Food Services, it might not be quite as strong once the 2011 Benchmarking process has been completed.

It appears that the Food Services Industry accounted for much of the growth in the Accommodation and Food Services NAICS sector. Drilling down further, the growth in Foods Services jobs was nearly evenly split between Full-Service and Limited-Services restraints (and, it is this industry that may be particularly affected by next year's benchmarking, as discussed above). The next biggest contributor to job-growth was Retail, which accounted for 29%, or 4,100 net, new jobs between December 2009 and May 2010. The growth in Retail jobs seems to be broad-based, with particularly strong boosts in Building Materials and Motor Vehicles. Close behind Retail is Administration Support and Waste Management (hereafter Admin-Support), which contributed 4,000 net, new jobs, or 28% of the jobs added to Connecticut's Economy between December 2009 and May 2010. As for the U.S. Economy, a large driver of the job-growth and declines over the business cycle is Employment Services, particularly Temporary Help.

TEMPORARY HELP AND THE BUSINESS CYCLE— Unfortunately, Connecticut's Employment Services is not broken down by industries in the Establishment Survey, so Temporary Help cannot be isolated as it could for the discussion of the U.S. jobs market. Temporary Help accounted for about three-quarters of all U.S. Employment Services jobs. Assuming Connecticut's Employment Services Industry is similarly distributed, and that it follows the national pattern of more extensive use of temporary and contingent workers, reflected by the increasingly larger swings in the Year-to-Year (YTY) percent-change in employment in the Employment Services Industry over successive cycles since 1990. Over the recent crisis/panic, the 32.69% decline in Connecticut's Employment Services jobs in March 2009 (topping the 21% declines in the two previous Post Cold War recessions), on a YTY basis, is the largest over the range of available data. From that

point on, the YTY growth-rate accelerated in an almost vertical climb, and in May 2010, the YTY growth-rate in Connecticut's Employment Services jobs was 14.62%. It is this behavior of temporary help employment over the business cycle that has been the principal driver of the Admin-Support Sector.

TREND-DRIVEN SECTORS— Health Care and Social Assistance (HCSA) accounted for 23% of Connecticut's job-creation between December 2009 and May 2010. However, HCSA and Education were the only two NAICS sectors adding jobs to Connecticut's Economy over the recession and panic. Both HCSA, and Education (which accounted for 6.3% of the jobs added during the current recovery), are both driven by trend-dominated factors.

Manufacturing is being driven by both trend and cyclical forces. And, so far, Manufacturing jobs have actually increased over the current recovery, contributing a modest 200 jobs. The Professional, Technical, and Scientific Sector (hereafter Prof-Tech) accounted for 21%, or 3,000 jobs, created over the current recovery. Like Admin-Support, this too is a sector in which strong cyclically, dominated industries play a major role in driving its behavior over the cycle.

HOWEVER, Sectors Are Still Losing Jobs—Eight of Connecticut's NAICS sectors continued to shed jobs over the current, apparent recovery. Three of those sectors accounted for one-third of the net job-losses between December 2009 and May 2010, and are directly connected to the epicenter of the recent housing bubble, recession, and financial panic. Finance and Insurance accounted for 17.4%, or 2,500, jobs lost, Construction had a net loss of 2,000 jobs, and accounted for 14% of jobs lost, and Real Estate had a net decline of 200 jobs, accounting for 1.39% of jobs lost. Three NAICS sectors contributed just under 14% to just over 15% to job-losses, and combined accounted for nearly 44% of net, job-losses. Transportation and Warehousing had a net loss of 2,200 jobs, Other Services shed 2,100 jobs, and Wholesale Trade had a net decline of 2,000. Information had a net-loss of 600 jobs, and Management of Companies and Enterprises

WHAT IS THE SIGNAL FROM WEEKLY UI CLAIMS?—Since Initial Claims for Unemployment Insurance (UI) are reported on a weekly basis they are the most, timely indicator of labor-market conditions. The most common way to assess and present UI Claims data is to use a Four-Week Moving Average (4-WMA).

The January 2010, the 4-WMA of Initial Claims was still above 10,000, which is still at recessionary levels. And, after Week-to-Week (WTW) declines in Initial Claims continued through February and March, they reversed direction in April, and the WTW change jumped as high as 10%, the week of April 24<sup>th</sup>, but continued to decline in May, for four consecutive weeks. In addition, the YTY percent-change in the 4-WMA of Connecticut's Initial Claims have experienced the largest declines since December 1993. Thus, the signals from the Initial Claims data are that a recovery is probably underway, and the jobs data discussed above, reinforces this reading on the current state of the Connecticut Economy. Of course, the sustainability of the current, apparent recovery, both at the national and state levels, is in question.

### ***BUBBLE, RECESSION, AND PANIC: Assessing the Hit to the State's Economy***

There has not been a U.S. recession accompanied by a financial panic since The Great Depression. Consequently, looking to the historical record of the post-war recoveries will not be as informative as it was for understanding the dynamics of previous post-war recoveries. And, in fact, the historical reference, in many respects, must reach much further back in time to previous episodes of banking panics in the first third of the 20<sup>th</sup> Century, and even the last half of the 19<sup>th</sup> Century, as well as from cross-country studies.

The principal concern over what appears to be a recovery underway is: Can the economy sustain a recovery and propel itself on to the expansion phase once government supports are phased out? Recessions accompanied by financial panics are usually followed by

weaker recoveries, especially on the heels of a popping asset bubble, due to the damage done to the economy's balance sheets, in conjunction with the disruption in the flow of credit. This section re-traces how the recession and panic impacted the major sectors of Connecticut's Economy and what it implies for a sustainable recovery.

CONNECTICUT'S LABOR MARKETS-- Nearly 20% (20,400 jobs) of all the jobs lost in Connecticut's Economy between March 2008 and December 2009 were in Manufacturing. The next biggest hit was Construction, which shed 15,400 jobs and accounted for 15% of jobs lost. Retail accounted for another nearly 15% of job-losses. Admin-Support and Professional-Technical each accounted for more than 10% of jobs lost, and Finance and Insurance, Government, and Wholesale Trade each contributed more than 5% of the jobs lost during the recession/panic.

The pattern of Connecticut's job-losses seems to be pretty close to that of the U.S. For both Connecticut and the U.S., Manufacturing accounted for the most jobs lost this was followed by Construction and Retail. Construction, of course, was directly impacted by the bursting of the housing bubble, and retail indirectly, as consumers funded their spending, at unsustainable levels, by using their homes as ATM's. As discussed above, Admin-Support is driven by the behavior of the Temporary Help Industry over the business cycle. But, Professional-Technical is also driven by a couple of cyclically sensitive industries, particularly, Engineering and Architectural, which is tied to the Construction Sector, and Computer Systems and Design, which is tied to the Financial Sector, particularly the Insurance Industry.

When ranking Connecticut's NAICS sectors by the steepness of their job contractions over the recent recession/panic, not surprisingly, Construction, is the most negatively impacted sector, it contracted by 23% between March 2008 and December 2009. This was followed by Admin-Support, again, driven by Temporary Help employment-losses, and Professional and Technical, also driven by cyclically sensitive industries, particularly, Engineering and Architectural, which is tied to the Construction Sector and Computer Systems and Design whose services are heavily targeted toward the financial

sector. Manufacturing contracted by 10.83% and Information and Real Estate each contracted by between 9% and 10%. Retail and Wholesale Trade each contracted by between 8% and 9%.

IT IS AN ILL WIND THAT BLOWS NO GOOD—Even in the midst of the worst recession since the 1930's, there were sectors still adding jobs. Most net, new jobs, both nationally and in the State's Economy, were created in the Health Care and Social Assistance (HCSA) Sector. HCSA added 7,400 jobs to Connecticut's Economy between March 2008 and December 2009. That represents a 3.11% increase in the HCSA job-base. The other sector to add jobs over the recent recession/panic period was Education, which expanded by 2.63% that translates into an addition of 1,500 jobs over the 21-month recession period. Growth in HCSA and Education were driven by longer-term, demographic factors that muted any cyclical forces. However, HCSA job-growth in Connecticut may be muted by the losses in the Hospital Industry that began toward the end of 2008, and Education may be severely impacted by budget cuts due to the reduction in State aid to cities and towns resulting from the State's budget deficit.

INCOME AND SPENDING-- The level of consumer spending in the economy is based, not on total income, but on *disposable* income. That is, what consumers have to spend after their income is adjusted for any transfer payments received and any taxes taken out. Between 2008Q4 and 2009Q1 the decline in Personal Income (Net Transfers) was the largest, and only negative, component contributing to the QTQ change in Nominal DPI. Current Personal Transfer Payments made the largest positive contribution, with the reduction in Tax Payments the next largest contribution to CT. DPI growth. With the smaller decline over the 2009Q2-Q3 Period, again, PI (Net Transfers) was the biggest subtraction from Nominal DPI. However, over the current cycle, it appears that Connecticut Real DPI did not decline as steeply as Real QPI, Real CT DPI declined by 2.13% in 2009Q1, but Real QPI declined by 3.82%, CT Real DPI growth was barely positive again at 0.14% in 2009Q4.

### NON-FARM EARNINGS AND EMPLOYMENT OVER THE RECESSION/PANIC--

Over the recent recession/panic (2008Q1 to 2009Q4), quarterly, Non-Farm Employment declined by 5.74%, while Real, Non-Farm Earnings declined by 4.64%. Looking at the response of Connecticut employment to a one-percent change in Connecticut, Real Non-Farm Earnings, over the recent recession, for every one-percent decline in Real Earnings, Connecticut's employment contracted by 1.24%. Thus, there was a greater than proportional decline in jobs from a one-percent decline in real earnings. Connecticut's earnings declined more steeply than U.S. earnings. U.S. Real, Non-Farm Earnings declined by 3.77% over eight quarters (2007Q4 to 2009Q4), while Connecticut's Real Non-Farm Earnings declined by 4.64% over seven quarters (2008Q1 to 2009Q4). The difference appears to be in private versus public-sector earnings. U.S. Private Real, Non-Farm Earnings actually declined more steeply than Connecticut's Private, Real Non-Farm Earnings. However, U.S. real, public-sector earnings grew by 7.73% between 2007Q4 and 2009Q4, but, between 2008Q1 and 2009Q4, Connecticut's Real Earnings in the Government Sector grew by less than 1%.

THE STATE'S HOUSING MARKETS—One of the first signs of the impending bursting of the housing bubble was the abrupt decline in existing home sales after reaching unprecedented heights. This was true at both the national and the state level. In 2005Q1, Connecticut Existing Homes Sales turned down, one quarter before the downturn in national sales. By 2009Q1, Existing Home Sales had fallen by 53% from their peak. By the fourth quarter of 2009, the quarter of a possible turnaround in the State and National economies, Existing Home Sales recovered to 58,000, a 45% rebound. Though data for the second quarter of 2010 are not yet available at the time of writing, 2010Q1 Existing Home Sales numbers sent an ominous signal about the State's housing market. Existing Home Sales fell from a level of 58,000 in 2009Q4 to 49,600 in 2010Q1, a decline of 8,400, or 14.5%.

We Won't Get Fooled Again?--Housing permits did not begin their precipitous drop until after March 2006. And, it is housing permits that caused many economists, policymakers, commentators, and others to reject the idea that there was a housing bubble, especially in Connecticut. Many had argued that new household formation driven by demographics



and immigration justified rising home values. But pressure on the demand for residential living space should have driven up the price of residential space, regardless of tenure (i.e., owner-occupied or rental). That is housing prices and rents should have been rising in tandem (see Volume 1: *U.S. Outlook*). But, that is not what was happening. The following discussion explains why the disconnect between house prices and rents should have been a red flag. .

Over the recent bubble, the monthly level of Housing Permits in Connecticut never approached the levels of the early 1970's and the 1980's real estate bubble. It was Mark Twain who said that history doesn't repeat itself, but it rhymes. Each asset bubble throughout history seems to have a different twist lulling each new generation of participants into believing that "this time is different" [to use Rogot and Rienhart's (2009) expression, and title of their book] Thus. Many discounted any imbalances in the housing market by pointing to the low level of permits, and tight land-use regulation restricting the supply of housing, which argued against any possible oversupply of housing. However, oversupply, per se, was not at the heart of the recent housing bubble. The heart of the 2000's housing bubble was in a credit bubble fueled by the Federal Reserve and the trade deficit, the financing of home buying, a bubble psychology, and new "innovations" in the securitization of pools of mortgages, which resulted in riskier borrowers being given mortgages that were to re-set at higher, unsustainable payment-levels. Thus, this was a housing-finance crisis, and therefore, the indicators of impending trouble were not in housing permits, but in other indicators that were not widely considered. One of those indicators, the ratio of the Median House Price-to-the Median Rent was reaching very high levels by historical standards, and another, the ratio of the Median House Price-to-Median Household Income was also reaching very high levels, especially in Connecticut.

Current State of Connecticut's Housing Markets—As discussed above, Connecticut's Existing Home Sales declined by 8,400, or 14.48% between 2009Q1 and 2010Q1, the latest available data. After bouncing back from their low of 128 in January 2009, Total Housing Permits peaked at 294 in July 2009. From then on, they once again declined to a

low of 207 in January 2010—a 47.46% decline. So far, since January, permits have increased every month of data in 2010 (February to April, and reached a level of 331, up 124 (+60%) from the January low. However, it should be noted that the last month of available data is also the last month of the \$8,000 First-Time Homebuyer's Tax Credit program. Though homebuyers have until June 30<sup>th</sup> to close, the question remains as to whether or not the housing market will continue to recover after this program expires.

The last three quarters of available data from the Federal Housing Finance Agency (FHFA) show three consecutive quarters of QTQ declines in Connecticut house prices, but at a decelerating rate, and only a relatively small decline in 2010Q1 (-0.28%). On a YTY basis, the FHFA House Price Index (HPI) for Connecticut has been declining just under 5% per quarter since 2008Q4. YTY, it seems that there is a steady erosion of house values that is neither, accelerating or abating. Foreclosure data for 2010 seem to be sending mixed signals about the current state of Connecticut's housing markets. The April foreclosure numbers from The Warren Group showed that Connecticut had 451 foreclosures, down from 648 in March. That is a MTM decline of 30.4%. However, over the first one-third of 2010, there have been 2,620 foreclosures, compared to 1,839 for the first one-third of 2009, that represents a YTY, same-period increase of 42.5%. The numbers from RealtyTrac show that foreclosure filings fell from 2,915 in April to 2,088 in May. That represents a 30% MTM decline, but up 90% on a YTY basis—again, the data paint a mixed picture.

CONNECTICUT'S FINANCIAL SECTOR-- The Rise of Connecticut's Financial Sector over the last two decades has resulted in its increased importance to the State's Economy. While Finance and Insurance Earnings have increased their share of Total Non-Farm Earnings, Manufacturing's Earnings have declined. And, in 2001Q1, the share of Finance and Insurance pasted above that for Manufacturing. Even with the dip in Finance and Insurance Earnings share in 2009Q1, it still remained above Manufacturing, and has since, recovered much of its share. Further, while Connecticut's Manufacturing Sector employment has declined significantly since 1990Q1, employment in the Finance and Insurance Sector has pretty much maintained its share of Non-Farm Employment. As a

consequence, manufacturing has been losing its stature in Connecticut, both in terms of earnings and jobs. At the same time, Finance and Insurance has gained in share of earnings and pretty much maintained its share of employment.

Connecticut's Financial Sector: Recession and Panic---By December 2007, the initial events signaling the impending financial crisis, including the collapse of the Asset-Backed Commercial Paper market (ABCP) in August had already unfolded. And, the National Bureau of Economic Research (NBER) had since declared December 2007 as the turning point ending the previous recovery/expansion. And, although Connecticut's Economy would not turn down until three months later in March 2008, this, nevertheless, seems to be the most appropriate point in which to take a snapshot of the distribution of employment in the U.S. and Connecticut Finance and Insurance sectors. There were significant differences in the distribution of jobs with the U.S. and Connecticut Finance and Insurance sectors. Connecticut's Finance and Insurance jobs were concentrated in the Insurance Industry, while the U.S. sector's jobs were concentrated in Credit Intermediation (and Monetary Authority), and Connecticut also had more employment concentrated in the Securities, Commodities, and Brokers Industry, as well as the smaller Funds and Trusts Industry. Given that the largest concentration of U.S. Finance and Insurance jobs was in Credit Intermediation in December 2007, it is no surprise that it also contributed the largest share of job-losses to the sector between December 2007 and December 2009. Nearly 59% of U.S. Finance and Insurance jobs lost were in Credit Intermediation, but 46.3% of jobs were in that industry. Thus, Credit Intermediation, job-losses were heavily concentrated, based on the December 2007 share. Nevertheless, the relative hit to Connecticut's Credit Intermediation Industry was much greater. Though this industry employed, just under, 25% of Connecticut's Finance and Insurance workers, its relative contribution to job-losses over the recent recession/panic was double (nearly 48%) that of its share of Connecticut's Finance and Insurance employment in December 2007. Both, Securities, Commodities, and Brokers and Insurance were under-represented in their contribution to job-losses, based on their shares of Finance and Insurance employment in December 2007. In fact, the Insurance Industry's relative contribution to employment losses was just over half its share of employment in December 2007. The

only other over-represented industry, in terms of job-losses, was the smaller, Funds and Trusts Industry, which contributed twice as many jobs to losses as its share of employment in December 2007 (3.9% versus 8.5%).

The two steepest declines in employment for Connecticut's Finance and Insurance Sector were the 9.21% in Credit Intermediation, which was steeper than its U.S. counterpart, and the 10.42% contraction in Funds and Trusts, which was double the decline in the U.S. Funds and Trusts Industry. The U.S. employment declines in Securities, Commodities, and Brokers and Insurance were both steeper than their Connecticut counterparts. Connecticut's steepest declines were in those industries that had smaller shares of employment in December 2007 than their U.S. counterparts. The net result was that Connecticut's Finance and Insurance Sector lost 4.79% of its jobs between December 2007 and December 2009, while the U.S. Finance and Insurance Sector lost 6.16%.

Connecticut's Financial Sector In the Aftermath of Recession and Panic---After what appears to be a turnaround in jobs in December 2009, though Connecticut's Non-Farm Employment grew faster than the U.S. between December 2009 and May 2010, job-losses in the State's Finance and Insurance Sector actually began accelerating and were steeper than the job losses in the U.S. Finance and Insurance Sector, especially in Credit Intermediation.

## ***THE ECONOMIC CRISIS AND THE STATE BUDGET***

On July 1, 2010, Connecticut Comptroller, Nancy Wyman, in her statement to the Governor on Connecticut's fiscal condition, stated that The General Fund budget for FY2010 has been balanced through the use of:

- \$1.278 billion in budget reserve funds,
- Over \$800 million in federal stimulus dollars, and
- Payment deferrals and one-time transfers.

Further, in the absence of these non-recurring revenues and expenditure reductions, the Fiscal Year (FY) 2010 General Fund operating budget deficit would exceed \$2.0 billion dollars. In FY 2009, the state issued \$947.6 million in Economic Recovery Notes to close that year's operating deficit. And, though the steep declines in General Fund tax revenues, observed in the first half of this FY, have abated, and in light of significant increases in income tax and corporation tax rates, General Fund net tax revenues are still expected to be relatively flat as compared to last FY, and are expected to be \$1.8 billion below their FY 2008 level.

IMPACT OF ECONOMIC CRISIS ON STATE REVENUES--Though the length of decline in Connecticut's General Revenues and the Personal Income Tax were three and six months shorter over the recent recession/panic than they were during the 2001 Recession, they were steeper over the recent crisis. Further, the decline in Sales Tax Revenues was both longer, and steeper, over the recent recession/panic. The decline in revenues from the Corporate Income Tax was eight months longer over the recent recession/crisis, compared to the 2001, though not as steep. On a compounded, annualized basis, Connecticut General Revenues, Personal Income Tax, and Sales and Use Tax all had much steeper rates of decline over the recent recession/panic, compared to the 2001 Recession. Although, over the 2001 Recession, the Corporate Income Tax declined at a rate more than double that of the recent crisis, its decline lasted eight months longer over the recent crisis.

STATES GET A TEMPORARY REPRIEVE--A temporary reprieve was granted to the states when President Obama signed into law the Education, Jobs and Medicaid Assistance *Act* on August 10, 2010. Connecticut is slated to get an estimated \$309 million to help stave off teacher layoffs and cuts to Medicaid, which translates into \$110 million for local schools and \$199 million for Medicaid.

HOWEVER, STATES STILL FACE BUDGET STRESS--Though the bill President Obama signed into law in August, will certainly go a long way toward cushioning states' budget shortfalls, the states will still face significant fiscal stress in FY2011, and beyond. Nationally, state and local employment accounted for 15.1% of U.S. Non-Farm

Employment. According to Mark Zandi of MoodysEconomy.Com, in his testimony before Congress, if states get no more fiscal relief, they will have to take steps to eliminate deficits for state FY2011. He estimates that those steps could shave nearly a full percentage point off of GDP. That, in turn, could cost the economy 900,000 jobs. Historically, the State and Local Sector has accounted for about 12% of GDP and have added about ¼ of a percentage point to annual GDP on an ongoing basis. If the State and Local Government Sector slips back into negative territory, it could contribute to a reversal of this still-fragile recovery.

### ***WHERE DOES THE STATE'S ECONOMY GO FROM HERE? The Outlook for 2009-2011 and Beyond***

THE CONNECTICUT ECONOMY: Outlook for 2009-2011---As noted in the introduction, Connecticut seems to have done something over this cycle that it has not done before in the Post Cold War Era. Non-Farm Employment turned down going into the last recession after that of the U.S. and the State's recovery in jobs coincided with that of the U.S. jobs recovery rather than lagging it. Further, Connecticut's job-growth since the December 2009 recovery has been stronger than that for the U.S. And, until May, so was Private-Sector job-growth. But, Connecticut's Private-Sector job-growth trajectory flattened out in May, indicating a possible slowing in private-sector job growth. The June numbers showed a significant deceleration in private job-growth for the U.S. Government job growth had been stronger for the U.S. than for Connecticut until May when both U.S. and Connecticut Government job-growth spiked due to the hiring of Census workers. Based on the U.S. drop in June, the State's Government jobs may drop in June as well. The question is: Will the current recovery continue? Will the recovery slow to a crawl turning into a Japan-style lost decade, or will there be a repeat of the 1980 and 1981-82 double-dip recessions? The possibility that it could accelerate seems unlikely at this point.

Forecast for Annual Job Growth: 2009-2011-- On an annual basis, it is expected that Connecticut's economy will recover from the steep losses of 2009, but still register a decline of 5,000 jobs in 2010 as a result of the current recovery's slowing momentum going into the second half of the year. Assuming that, even if the recovery slows over the last one-half of 2010, it will nevertheless, continue, annual job-growth will turn positive again in 2011, for the first time since 2008, and that Connecticut will recover 15,730 jobs.

Forecast for 4<sup>th</sup> Qtr-to-4<sup>th</sup> Qtr Job Growth: 2009-2011-- Turning to the fourth-quarter-to-fourth quarter forecast for Connecticut employment, The Goods-Producing sector is expected to continue losing jobs over the forecast period, on a fourth-quarter-to-fourth quarter basis. However, losses will decelerate from 40,831 between 2007Q4 and 2009Q4, to 4,467 jobs over the 2009Q4-2011Q4 Forecast Period. Though losses are expected to subside in the Construction Sector, due to the continued drag of housing on the economy, not much growth is expected. Manufacturing, after hemorrhaging 24,000 jobs between 2007Q4 and 2009Q4, is expected to return to trend-losses, with about 3,000 more lost jobs over the 2009Q4-2011Q4 Forecast Period, due to continued re-structuring, including downsizing and outsourcing. As a result, on a 4<sup>th</sup> Quarter-to-4<sup>th</sup> Quarter basis, it is expected that, after shedding 66,025 total Non-Farm jobs between 2009Q4 and 2009Q4, Connecticut's Economy will recover 20,150 Non-Farm jobs between 2009Q4 and 2011Q4.

Sectoral Detail--After losing 25,194 jobs over the 2007Q4-2009Q4 Period, the Services-Providing Sector is expected to return to job-growth over the forecast period, adding 24,617 jobs, modest growth compared to the 51,077 jobs created over the 2005Q4-2007Q4 Period, as the last expansion was coming to a close. Once again, Health Care and Social Assistance (HCSA) is projected to account for a significant portion of net-job gains over the forecast horizon. HCSA is expected to add 7,700 jobs between 2009Q4 and 2011Q4, and account for 39% of all the net job-gains in the Services-Providing Sector. However, the growth-rate is expected to slow from the 5.5% pace between 2007Q4 and 2009Q4, to 3.0% over the 2009Q4-2011Q4 Forecast Period. Another

previously strong-growing sector, Education, may also be facing some severe headwinds going into the forecast period. Its pace has already slowed from a 7.7% rate (+12,700) between 2005-07, fourth-quarter-to-fourth-quarter, to 2.1% (+3,700) over 2007Q4-2009Q4. The growth-rate is expected to slip to 1.9% (+3,500) over the 2009Q4-2011Q4 Forecast Period. In fact, even the modest forecast for job-growth in the Education Sector may be overly optimistic.

After losing 13,700 over the 2007Q4-09Q4 Period, Admin and Support is expected to recover 5,000 jobs over the forecast period. It is expected that employers will rely very heavily on temporary and contingent workers over the coming recovery and beyond. Another sector with a large amplitude over the business cycle is Professional, Technical, and Scientific. This sector too is driven by a few industries that dominate the cyclical behavior of the sector. Particularly, Computer Systems and Design, which accounted for three-quarters of the sector's job-growth between 2005Q4 and 2007Q4, and for one-quarter of the sector's losses over 2007Q4-2009Q4. Also contributing 1,000 jobs each to the 7,700 jobs lost in Professional, Technical, and Scientific were Architectural and Engineering, which accounted for 26% of the job-losses, Advertising, which accounted for 16% of the losses, and Legal, which contributed 14% of the sector's job-losses. A good portion of the 2,900 projected job-gains for the Professional, Technical, and Scientific Sector between 2009Q4 and 2011Q4 will be in Computer Systems and Design. Last, but certainly not least, especially concerning Connecticut's Economy is the forecast for Finance and Insurance Sector. Though it accounted for 42% of Finance and Insurance jobs in 2007Q4, the Finance sub-sector contributed 55% to the job-losses in this sector between 2007Q4 and 2009Q4. The principal activity under this heading is Credit Intermediation. And, though it accounted for only 26% of jobs in this sector in 2007Q4, Non-Depository Institutions accounted for two-thirds of all job-losses between 2007Q4 and 2009Q4, in which employment was concentrated in Real Estate Credit and Sales Financing. Job-losses in Depository Institutions, Commercial Banks and Savings Institutions, began to accelerate in 2009. It is expected that losses in Depository Institutions, Real Estate Credit, and Sales Financing will continue, though the pace will slow from a 7% decline between 2007Q4 and 2009Q4, to a 2% decline over the forecast



period. Insurance, though recovering from the 2,700-job decline between 2007Q4 and 2009Q4, is still expected to shed another 800 jobs over the forecast period.

RISKS TO THE FORECAST: Very High—The risks to the forecast are quite high, and tilt toward the negative side. Some major risks include:

- The European debt crisis is a potential threat to Connecticut's Economy, as the Eurozone has two of Connecticut's three largest export destinations, France and Germany.
- The \$8,000 first-time homebuyers' credit ended on April 30, 2010 and much of the Federal fiscal stimulus package (ARRA) spending ends in 2011. In addition, the Fed began withdrawing from its program of buying up Residential Mortgage-Backed Securities (RMBS).
- An ensuing fiscal crisis for most states that must balance their operating budgets by law could cut the tentative recovery short. Although, a temporary reprieve was granted to the states when President Obama signed into law the Education, Jobs and Medicaid Assistance *Act* on August 10, 2010.
- The housing sector, with its consequent multiplier effects, will continue to act as a drag on the economy. In addition, Connecticut can expect another generation of ARMs to re-set in 2010 and 2011, which could bring about a new wave of foreclosures.

In the final analysis, the need for households to continue the long process of repairing their balance sheets, by working off excessive debt-loads, in the face of continued weak housing prices, will act as a significant drag, on both, the State and National economies over the entirety of the forecast horizon.

THE CONNECTICUT ECONOMY: Beyond 2011---With the end of the Cold War and the downsizing of the defense industry, in conjunction with the restructuring of the insurance industry, the Connecticut Economy's ability to create jobs has been severely effected. In the 1990's, Connecticut's job-creation rate fell to an anemic 0.5% per year. And, the first eight years of this century have seen a collapse in the job-creation ability of both the U.S. and the Connecticut economies. The U.S. added jobs at weak 0.6% per year rate between 2000 and 2008, and Connecticut for all practical purposes had no job

growth, adding jobs at a rate of only 0.05% per year. Further, since the end of the Cold War, defense cutbacks, and the restructuring of the insurance industry, Connecticut has become more strongly tied to the fortunes of the U.S. Economy.

The changing fortunes of regional economies, driven by changes in competitive advantage, has resulted in a trend of firms' reconfiguring themselves through what is termed "outsourcing", or what economists call Vertical Disintegration, or Production Fragmentation. *Vertical Disintegration*, or outsourcing occurs when a firm contracts out to an external supplier to provide a function previously performed internally, within the firm, or spins off a division, at an earlier stage of its production process, to form a new firm. Whether or not the U.S. is a net beneficiary of offshore outsourcing, and how much is of the on-shore type is not critical for the affects it would have on Connecticut's economy. Critical to Connecticut's labor market, is whether or not outsourcing is out-of-state, regardless of whether or not it is onshore, or offshore with regard to the national economy.

In light of this trend, it appears that Connecticut's muted GDP-growth and declining labor-market dynamics since 1997, may have not only been driven by higher productivity, compared to the U.S., but also by a faster than national pace, in the vertical disintegration of its industry structure resulting in GDP declining as a share of Gross Output (GO), in conjunction with growth in the importation of Intermediate Inputs from out of state. If these trends continue, then the long-term outlook appears to be one in which the State's firms continue the process of vertical disintegration at a faster pace than the U.S., which, in turn, if most outsourcing is out-of-state, translates into slower growth in GDP (= Value Added), firm formation, and job creation.

# **Connecticut Long-Term Occupational Projections 2008 - 2018**

## **Occupations that require less than an Associates Degree.**

### **Overview**

Every two years, the Connecticut Department of Labor (CTDOL) produces the state's long-term occupational projections to show labor market trends for the next ten year period. These projections can help job seekers, schools, researchers and others to learn about growing occupations and projected employment demand.

The tables in this report highlight the following information: the fastest growing occupations, occupations with the largest new job growth, occupations with the most annual job openings, education and training requirements, declining occupations and high paying occupations. The following tables are limited to those occupations that typically require less than an Associates degree as a minimum qualification.

Individuals interested in examining the projections data further can find the projections data tables and other occupational information online at <http://www1.ctdol.state.ct.us/lmi/projections.asp>.

### **Methodology & Technical Notes**

Connecticut's occupational projections were developed using the state's industry employment data--the Quarterly Census of Employment and Wages (QCEW)--and the state's Occupational Employment Statistics (OES) survey results. Utilizing Connecticut's historical industry-level employment data through 2008 and key economic determinants for the state and the nation, single-equation regression models were estimated to produce the State's projected industry employment through 2018. Staffing patterns, showing the composition of occupational employment by industry, came from the Occupational Employment Survey, (OES) survey. The staffing patterns were adjusted using national change factors to reflect changes in occupational mix expected to occur over the next ten years. Connecticut's occupational projections resulted from the application of the occupational staffing patterns to the 2018 industry-level employment projections.

Occupations with less than fifty employees in the base year were excluded from this report. Additionally, occupations having too few employers in the base year were excluded to protect the confidentiality of employers and employees.

### **Limitations**

Connecticut occupational projections provide a general guide for the direction and relative strength of employment demand but are not intended to indicate precise and absolute levels of job openings. Unpredictable external factors such as business cycles, technological changes, political events and changes in consumer tastes may alter actual occupational demand. Also, assumptions about the national economy (e.g., government spending levels, energy prices, inflation and unemployment) were made by using U.S. Bureau of Labor Statistics projections of these variables. Actual values of these national economic factors may differ from the assumptions.